# APPENDIX G PROCLAMATION BOUNDARY MAPPING

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### Introduction

Appendix G, Proclamation Boundary Mapping, describes the analysis process by which the Green Mountain National Forest (GMNF) designated Management Areas for non-National Forest System Lands within the GMNF Proclamation Boundary, or Forest Boundary. Under the 1987 Land and Resource Management Plan for the GMNF, there are approximately 90,000 acres of newly acquired lands, managed in Management Area (MA) 9.2. These lands have been added to the GMNF since the early 1980s and represent almost a quarter of the existing GMNF land base in a designation where little, or no, management has occurred since federal acquisition. Concerns have been raised from State and town officials, non-governmental organizations, landowners, and the public regarding the inability to assign another management area designation in a timely manner and the lack of active land resource management occurring on these lands. Concerned publics question future land acquisition until the GMNF is better equipped to designate and manage new lands in a timely manner.

The GMNF proposed and evaluated two options to remedy the situation for any future land acquisitions. Option 1 proposed that newly acquired lands receive the same designation as adjacent National Forest System (NFS) lands, determined at the time of the acquisition. Option 2 proposed to pre-designate management areas on all non-NFS lands within the Proclamation Boundary during the Plan revision process. This is similar to the methodology used by other national forests in the Eastern Region. After internal and external feedback, Option 2 was selected as the preferred option for the following reasons.

Option 2 benefits the public by providing advanced knowledge on how the GMNF would manage individual tracts, during the life of the Plan, if acquisition were ever to occur. This is not the case under Option 1 and the current situation. Option 2 also allows flexibility for management area validation prior to, and following, the acquisition of lands, and helps restore credibility among those publics concerned with the current status of newly acquired lands. Moreover, if further analysis generates more information, the GMNF can amend the Forest Plan after acquisition or during project specific NEPA analysis. It is important to note, however, that the manner in which land is pre-designated under Options 2 does not alter the acquisition priorities under the revised Forest Plan; the GMNF will continue to acquire land on a willing-seller basis. The following describes the environmental analysis process in the context of information used, mapping strategy and process, and results used to designate those non-NFS lands within the Proclamation Boundary.

## **Information Sources**

In creating management alternatives for NFS lands, the Planning Team developed a mapping strategy that involved internal and external audience input to help formulate the assignment of management areas. The mapping strategy utilized clear film overlays that showed the GMNF ownership. The overlays were placed on top of Forest resource maps, allowing publics to color management area distributions Forest-wide. The identified resource maps used in this process included:

- Land Type Association
- Rare/Exemplary Natural Communities
- Deer Wintering Yards
- Timber Suitability
- Forest Roadless Areas
- Recreation Opportunity Spectrum (ROS)

To allow for a consistent process to be used for mapping of non-NFS lands within the Proclamation Boundary, similar resource maps were needed. Three of the above identified resource maps were already available for all lands within the Proclamation Boundary including Land Type Association, Rare/Exemplary Natural Communities, and Deer Winter Yards. The following methods provided similar information to be used in lieu of the Timber Suitability, Forest Roadless Areas, and ROS maps.

- Timber Suitability: Without silviculture exams to help identify timber suitability, the Forest Service isolated elevation and slope parameters to determine a threshold of sustainable versus unsustainable timber harvesting areas. Those thresholds isolated lands over 2,500 feet in elevation with slopes greater than 50 percent as extracted from a digital elevation model. These identified areas were used in the mapping exercises to help identify places where commercial timber harvesting might be sustainable or unsustainable.
- Forest Roadless Areas and Recreation Opportunity Spectrum: In the initial stages of Forest Plan Revision, a Forest Roadless Area map was developed for NFS lands. One of the criteria for developing these areas was to provide a Semi-primitive Non-motorized recreation opportunity core around 2,500 acres. After completion of the Recreation Opportunity Spectrum (ROS) inventory for all lands within the Proclamation Boundary, this information was available for non-NFS lands in lieu of the Forest Roadless Area map. In addition, the remaining ROS categories were identified for lands within the Proclamation Boundary. Additional information that was used to designate management areas on non-NFS lands is listed below.

#### Information Resources

- GMNF DRAFT Alternatives
- Heritage Program's Element of Occurrence Records
- State of Vermont's Agency of Natural Resource Recreation trails, Vermont Association of Snow Travelers trails, and Catamount Trail
- National Wetlands Inventory and Vermont Significant Wetland Inventory
- Vermont Hydrologic Data (1:5000 scale rivers and water bodies)
- Land Use Cover
- Digital Ortho Quads
- Land Sat imagery
- State of Vermont roads
- Ecological Land Type and Ecological Land Units
- Digital Elevation Model
- Watershed Boundaries
- Emergency 911 structure information
- The Nature Conservancy's biodiversity protection recommendations
- Vermont Biodiversity Project

### **Regional and Town Plans**

- 1997 Bennington Regional Plan
- 2001 Jamaica Town Plan
- 1999 Two-Rivers-Ottauquechee Regional Plan
- 2001 Windham Regional Plan

## **Mapping Strategy**

The mapping exercise was completed for Alternatives B-E; Alternative A does not include mapping of non-NFS lands in an effort to remain consistent with the "No Action Alternative." A driving force for mapping private lands was consistency with MA designation on adjacent NFS lands, as varied by Alternative. Although there was desire to treat the majority of the lands the same across all alternatives, the non-NFS lands vary in order to allow continuity with management area designations on adjacent parcels. An attempt to make logical and definable boundary extensions was made where appropriate. The management area designations mapped are: Diverse Forest Use, Diverse Backcountry, Escarpment, Remote Wildlife, Remote Backcountry, Wilderness, Ecological Special Area, Appalachian Trail, Long Trail, Moosalamoo Recreation & Education Area, and Alpine/Subalpine. The strategies for the management area designation are highlighted below.

- Diverse Forest Use can be designated in areas that have Roaded Natural, Rural, or Urban ROS characteristics. Existing ski and agricultural areas fall into this category.
- Remote Wildlife can be designated where known wildlife corridors and good wildlife habitats exist.
- Diverse Backcountry can be designated where known motorized trails exist and the ROS inventory is Semi-primitive Motorized.
- Remote Backcountry can be designated where the ROS inventory is Semi-primitive Nonmotorized
- Escarpment can be designated where the landscape feature occurs, generally defined by the Land Type Association GIS layer.
- Ecological Special Area can be designated where rare natural communities occur or where boundary extensions are appropriate.
- Eligible Wild, Scenic, or Recreational Rivers will be designated where the proposed rivers occur.
- The Appalachian Trail and Long Trail will be designated where the respective trails occur and will be given a 1,000 ft corridor (500 ft on each side of the trail).
- The Moosalamoo Recreation & Education Area will be designated where non-NFS lands are within the Moosalamoo Recreation & Education Area boundary (Alternative C & E).
- Wilderness will be designated only where private lands occur inside already congressionally designated Wilderness boundaries (Lye Brook Wilderness only).
- Alpine/Subalpine can be designated where the rare community exists, generally defined by the Land Type Association GIS layer.

After the initial mapping results, the strategy was to expand the level of input and develop a review and validation process. The Forest Service accomplished this by forming a review committee including Forest Service field technicians, specialists, and resource managers from the Rochester, Middlebury, and Manchester District Offices. Comments and input were then reviewed from the two meetings by Planning Team members, and incorporated where appropriate.

## **Mapping Results**

The Proclamation Boundary, the Green Mountain National Forest boundary as proclaimed by federal law, encompasses approximately 821,000 acres. Approximately 391,000 acres within the Proclamation Boundary are presently owned by the United States of America, set apart as the GMNF. Current ownership of non-NFS lands within the Proclamation Boundary is summarized below (Tables G-1 and G-2). The results of designating management areas on non-NFS lands for Alternatives B through E are presented in Table G-2. Maps showing non-NFS land allocation follow the tables.

Table G-1: Non-National Forest System lands within the GMNF Proclamation Boundary				
Ownership	Acres	Percent		
Private	416,009	97%		
Vermont Municipality	7,448	2%		
State of Vermont	5,568	1%		
Federal	472	0%		
Total GIS Acres	429,497	100%		
Source: Vermont Conserved Lands Database, UVM/SAL				

Table G-2: Management Area Designation on Non-National Forest Systems lands within the GMNF Proclamation Boundary

(Acres)				
Alternative B	Alternative C	Alternative D	Alternative E	
82	82	82	82	
429	429	429	429	
41,836	85,402	67,849	78,800	
361,829	312,118	275,101	295,186	
2,756	2,756	3,004	2,756	
1,316	7,904	14,788	12,657	
775	775	775	775	
0	2,979	0	3,085	
4,999	7,719	36,964	11,030	
15,385	9,243	30,415	24,607	
90	90	90	90	
21,065	21,065	21,065	21,065	
429,497				
	82 429 41,836 361,829 2,756 1,316 775 0 4,999 15,385 90 21,065	Alternative B Alternative C   82 82   429 429   41,836 85,402   361,829 312,118   2,756 2,756   1,316 7,904   775 775   0 2,979   4,999 7,719   15,385 9,243   90 90   21,065 21,065	Alternative B Alternative C Alternative D   82 82 82   429 429 429   41,836 85,402 67,849   361,829 312,118 275,101   2,756 2,756 3,004   1,316 7,904 14,788   775 775 775   0 2,979 0   4,999 7,719 36,964   15,385 9,243 30,415   90 90 90   21,065 21,065 21,065	

<sup>&</sup>lt;sup>1</sup> Management Area applied to stream corridors (1/4 mile each side of stream) which overlay and run through all other Management Areas